Government of India (भारत सरकार) Ministry of Railways (रेल मंत्रालय) (Railway Board रेलवे बोर्ड)

No.TC-I/2015/104/5

New Delhi, dt. 15.08.2019

Principal Chief Commercial Manager Western Railway

Sub: Electronic Payment System

Ref: WR's letter No.C.291/10/E-payment/Agr.Format Vol.II dt.15.05.2019

Please refer to WR's letter under reference wherein Railway has highlighted certain technical issues regarding multiple transaction Ids against single RR etc.

The matter was forwarded to CRIS/FOIS for examination. They have furnished point wise response from which it may be seen that against each CRIS' transaction Id, there can be only one Bank Transaction Id with a successful message received from Bank server. The system is so designed that it prevents/restricts the possibility of double debiting of customer's bank account. Regarding transaction done on 31st March, the credit of the transaction is given to the Railway on the day, the transaction is successful (copy of CRIS/FOIS' letter is enclosed herewith).

It is to state that FOIS/CRIS has no role in the case of generation of multiple transaction Ids by bank. Customer can hold the bank responsible for the same as a signatory to the e-payment agreement.

DA: as above

Director, Traffic Commercial(Rates)

Railway Board

Copy to:

Principal Chief Commercial Manager All Zonal Railways (except WR)



NORTHERN RAILWAY FREIGHT OPERATIONS INFORMATION SYSTEM Office of the CAO/FOIS, CRIS Complex, Chanakyapuri, New Delhi-110021

No. CAO/FOIS/94/Main/ E-Payment/Pt VII / 2017

Dated: 15.07.2019

Director, Traffic Commercial (rates)
Ministry of Railways
(Railway Board)
New Delhi.

Jag Salva

Sub: Electronic Payment system.

Ref: Your Office letter no. TC-1/2015/104/5, dated 29.05.2019 -> 5~ 178

In reference to above, requisite information regarding multiple transaction IDs are generated by Bank against a single Railway Receipt leading to debit from customer's bank account twice whereas Railway carning is credited once, the issue was forwarded to CRIS.

Reply of CRIS is being attached herewith for your kind information please.

Months put my

DY CPM/FOIS

CENTRE FOR RAILWAY INFORMATION SYSTEMS CHANAKYAPURI/NEW DELHI

No. 2017/CRIS/NDLS-HQ/AD/ZONAL RLY/FOIS/EPAYMENT/0029/PT-2 Dated: 08.07.2019

CPM/FOIS Office of CAO/FOIS, CRIS Campus, Chanakyapuri, New Delhi.

Sub: Electronic Payment System

Ref: Your office's letter no. CAO/FOIS/94/Main/E-Payment/Pt VII/2017 dated 30-05-2019.

The details sent vide above referred letter have been examined and the analysis of the issue is as under:

The e-Payment system is a B2B integration between FOIS and Bank servers dedicated only for Freight Collection. FOIS as well as Bank both maintain each e-Payment Customer's master details for validations and transaction purpose. FOIS/TMS processes transaction request after performing necessary validations involving various vital parameters. For each customer, there is only one dedicated debit and credit (Railway's Pool In account) account configured and transaction can happen between these two accounts only which is taken care by CRIS and Bank both.

Communication between CRIS and Bank Servers is protected by industry standard security measures and is certified by SSL Certificate. All financial data exchanged between the Bank and FOIS server is encrypted to ensure message confidentiality.

The pointwise comments against each issue and suggestions as mentioned in the above referred letter are given below:

(i) Multiple Bank Transaction IDs against a single RR No./CRIS Transaction ID: -

CRIS Comments: When a transaction is being fired by the Railway User in FOIS/TMS Application for collection of freight, FOIS System generates a Unique Transaction Id i.e. CRIS Transaction Id. Bank Server also generates a Unique Transaction ID against each transaction hitting their Server. In case of successful transaction in the first hit, the FOIS/TMS Application captures the CRIS Transaction Id as well as the Bank Transaction Id against the RR. However, in case of failure transactions, whenever, FOIS System initiate the transaction automatically for ERRs generated against LC/BG Amount, the CRIS transaction ID remains same corresponding to a transaction till it gets a Successful message from the Bank Server.

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58'-50 51 19 However, in case of any network/system failure when the transaction has been processed successfully at Bank's end and FOIS server doesn't receive SUCCESSFUI, message from Bank Server in the first attempt, in such cases Bank Server returns the previous collection details alongwith the Bank Transaction Id without further processing/debiting the transaction in subsequent attempts. This prevents/restricts the possibility of double debiting of customer's account. However, in case the said transaction was not successful in the first instance, Bank Server processes the transaction initiated by FOIS System and communicate the status of the transaction back to FOIS Server alongwith another Bank Transaction Id. However, it is to be mentioned that, against each CRIS Transaction Id, there can be only one Bank Transaction Id with a Successful Message received from Bank Server.

(a) Every RR No./CRIS Transaction ID should have a unique Bank Transaction ID.

CRIS Comments: It is further clarified that, for each e-Payment transaction request, FOIS System generates a unique Transaction ID as CRIS Transaction ID which is being sent to the respective bank server alongwith other vital parameters of the said transaction. In response to same, Bank also generates and returns a Transaction ID which is termed as Bank Transaction ID. The said unique Transaction ID gets generated each time on every transaction request of CRIS irrespective of status of the transaction (Success/Failure). However, it is to be mentioned that, against each CRIS Transaction Id, there can be only one Bank Transaction Id with a Successful Message received from Bank Server.

(b) Multiple Bank Transaction IDs should not be generated by Bank in case of failed transactions.

CRIS Comments: As multiple Bank Transaction ID are being generated by the Bank server as per their system design, CRIS cannot comment on the same. However, it is to be mentioned that, against each CRIS Transaction Id, there can be only one Bank Transaction Id with a Successful Message received from Bank Server.

(c) Bank Transactions ID should have a continuity which should be checked by FOIS.

CRIS Comments: Bank Server handles a lot of monetary transactions other than the transactions initiated by FOIS System. Moreover, as Bank Transaction ID is being generated by the Bank server as per their system design, CRIS cannot comment on the same.

(d) Bank Transaction ID should be preserved by Bank and should be used in all references related to FOIS transactions.

CRIS Comments: As Bank Transaction ID is being generated by the Bank server as per their system design, CRIS cannot comment on the same. However, as per discussions held with all the Banks, Banks preserve all the transaction details alongwith the corresponding Bank ransaction lds as Bank has been able to provide the previous transaction records whenever tasked for same.

(e) If the Bank debits a party's account twice by mistake, it should refund the party first because it is the Bank's fault. Later it can claim refund from Railway with proof (Multiple Bank Transaction ID against single CRIS Transaction ID and multiple credit to RBI).

CRIS Comments: In case of any network/system failure when the transaction has been processed successfully at Bank's end and FOIS server doesn't receive SUCCESSFUL message from Bank Server in the first attempt, in such cases Bank Server returns the previous collection details alongwith the Bank Transaction Id without further processing/debiting the transaction in subsequent attempts. This prevents/restricts the possibility of double debiting of customer's account. However, in case Railway Goods-Clerk has collected the due freight amount through other mode of payment for an e-RR issued against LC/BG, the immediate suspension of transaction is necessary to avoid debiting the customer's account through e-Payment mode also. Hence e-Payment system has been designed in such a way that twice debit of customer's account cannot take place except for twice payment through Money Receipt and e-Payment both on account of delay in suspension of e-RR

(ii) Some e-Payment transactions of $31^{\rm st}$ March are not included in the residual scrolls for previous financial year.

CRIS Comments: When a transaction hits the Bank server on 31st March and due to any technical issue, is not getting SUCCESSFUL on 31st March, the same will keep on hitting the Bank server irrespective of number of attempts/days till the same gets SUCCESSFUL. The credit of the same transaction is given to Railway on the day, the transaction is getting Successful. The further information on same can be provided by Bank as per their system design.

This is for your information please.

GM/FOIS